

REMARKS

Introduction

A three-month extension of time to respond to the April 5, 2006 Office Action is hereby respectfully requested. The Director is hereby authorized to charge \$510.00 in payment of the three-month extension-of-time fee to Deposit Account No. 06-1075 (order no.: 099999.0099). A duplicate copy of this paper is enclosed.

Claims 1-76 have been previously cancelled. Claims 77-108, 211-222, and 259-272 are currently withdrawn from consideration. Claims 109, 122, 135, 163, 179, and 195 have been amended to more clearly define the claimed invention. Claims 110-121, 123-134, 136-162, 164-178, 180-194, 196-210, and 223-258 are also currently pending in this application. No new matter has been added by the amendments to the claims. Applicant reserves the right to claim any lost subject matter in a continuation or divisional application.

Claims 109, 122, 135, 163, 179, and 195 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 109-210 and 223-258 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimoji U.S. Patent 5,420,458 (hereinafter "Shimoji") and Mattox et al. U.S. Patent 4,825,277 (hereinafter "Mattox").

Reconsideration and allowance of this application in light of the following remarks is hereby respectfully requested.

The Rejections Based on 35 U.S.C. § 112

The Examiner has rejected claims 109, 122, 135, 163, 179, and 195 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Particularly, the Examiner believes that the recitation of "at least one of the integrated circuits having a uniform thickness throughout a full extent thereof" in each of claims 109, 122, 135, 163, 179, and 195 "was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) . . . had possession of the claimed invention," (Office Action, page 3, lines 1-3). In order to expedite prosecution of this application, applicant has amended each one of claims 109, 122, 135, 163, 179, and 195 to not include the above recitation cited by the Examiner.

Therefore, for at least the foregoing reasons, applicant respectfully submits that each of independent claims 109, 122, 135, 163, 179, and 195, and any claims dependent therefrom, including claims 110-121, 123-134, 136-162, 164-178, 180-194, 196-210, and 223-258, comply with the written description requirement. Applicant respectfully requests, therefore, that the rejection of claims 109, 122, 135, 163, 179, and 195 under 35 U.S.C. § 112, first paragraph, be withdrawn.

The Rejections Based on 35 U.S.C. § 103

The Examiner has rejected claims 109-210 and 223-258 under 35 U.S.C. § 103(a) as being unpatentable over Shimoji and Mattox. Applicant respectfully traverses.

Claims 179-194 and 247-252

As defined by applicant's amended independent claim 179, a method of making an integrated circuit includes providing a thin substrate, forming on the thin substrate circuitry having a plurality of active devices, and "wherein the integrated circuit is elastic while retaining its structural integrity."

Nowhere does Shimoji or Mattox show or suggest making an integrated circuit, "wherein the integrated circuit is elastic while retaining its structural integrity," as required by applicant's amended independent claim 179. However, on page 4, lines 12-15 of the Office Action, the Examiner contends that while "Shimoji does not specifically describe [that] the integrated circuit is substantially flexible while retaining its structural integrity[,]. . . . Mattox in col. 9 lines 1-13 describes the integrated circuit [that] is substantially flexible while retaining its structural integrity to the semiconductor surface."

Applicant respectfully submits that no such support is present in the specification of Mattox. Not at column 9, lines 1-13, nor anywhere else in the specification for that matter, does Mattox show or suggest that the integrated circuit is or could be elastic or make any claim regarding the structural integrity of the integrated circuit. Instead, Mattox simply teaches oxy-nitride plugs 58 (see, e.g., FIGS. 2D and 2I), which do not form a layer over active devices but instead are used as isolation walls to fill trenches between active devices. These isolation walls do not provide for an integrated circuit that "is elastic while

retaining its structural integrity," as required by applicant's independent claim 179.

Moreover, on page 7, lines 1-6 of the Office Action, the Examiner suggests that column 5, lines 1-5 and 27-29 of Shimoji teaches an integrated circuit that "is elastic while retaining its structural integrity," as required by applicant's independent claim 179. However, this section of Shimoji, specifically, merely describes etching portions of the substrate 21 to form recesses 8 under regions 51 and 52, while leaving portions of the substrate 21, as clearly shown in FIG. 2. This merely is to eliminate capacitance of a pn junction, and in no way shows or suggests that the integrated circuit of Shimoji is or could be elastic. Applicant agrees with the Examiner's contention on page 4, lines 12 and 13 of the Office Action that "Shimoji does not specifically describe [that] the integrated circuit is substantially flexible while retaining its structural integrity."

Therefore, for at least the foregoing reasons, applicant respectfully submits that independent claim 179, and any claims dependent therefrom, including claim 180-194 and 247-252, are allowable over Shimoji and Mattox. Applicant respectfully requests, therefore, that the rejection of claims 179-194 and 247-252 under 35 U.S.C. § 103(a) be withdrawn.

Claims 109-121, 148-152, and 223-228

Applicant respectfully submits that independent claim 109, and any claims dependent therefrom, including claims 110-121, 148-152, and 223-228, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is

patentable over Shimoji and Mattox. Specifically, the method of claim 109 includes forming a thin substrate, forming on the substrate circuitry including integrated circuits having active devices, "wherein the integrated circuit is substantially flexible while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 109-121, 148-152, and 223-228 under 35 U.S.C. § 103(a) be withdrawn.

Claims 122-134, 153-157, and 229-234

Applicant respectfully submits that independent claim 122, and any claims dependent therefrom, including claims 123-134, 153-157, and 229-234, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 122 includes forming a thin substrate, forming on the substrate circuitry including integrated circuits having active devices, "wherein the integrated circuit is elastic while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 122-134, 153-157, and 229-234 under 35 U.S.C. § 103(a) be withdrawn.

Claims 135-147, 158-162, and 235-240

Applicant respectfully submits that independent claim 135, and any claims dependent therefrom, including claims 136-147, 158-162, and 235-240, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 135 includes forming a thin substrate, forming on the substrate circuitry including integrated circuits having active devices, "wherein the integrated circuit is

substantially flexible and elastic while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 135-147, 158-162, and 235-240 under 35 U.S.C. § 103(a) be withdrawn.

Claims 163-178 and 241-246

Applicant respectfully submits that independent claim 163, and any claims dependent therefrom, including claims 164-178 and 241-246, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 163 includes providing a thin substrate, forming on the substrate circuitry having active devices, "wherein the integrated circuit is substantially flexible while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 163-178 and 241-246 under 35 U.S.C. § 103(a) be withdrawn.

Claims 195-210, and 253-258

Applicant respectfully submits that independent claim 195, and any claims dependent therefrom, including claims 196-210 and 253-258, are allowable over Shimoji and Mattox for at least the same reasons claim 179 is patentable over Shimoji and Mattox. Specifically, the method of claim 195 includes providing a thin substrate, forming on the substrate circuitry having active devices, "wherein the integrated circuit is substantially flexible and elastic while retaining its structural integrity." Applicant respectfully requests, therefore, that the rejection of claims 195-210 and 253-258 under 35 U.S.C. § 103(a) be withdrawn.

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Conclusion

The foregoing demonstrates that claims 109-210 and 223-258 are allowable. This application is therefore in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,



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